

JIGSAW



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... is a co-operative learning technique which structures student interdependence around learning tasks. Students learn part of the curriculum in small groups and then teach that part to their peers in other small groups. It is a way of implementing the pattern of COLLABORATIVE LEARNING and CO-OPERATIVE LEARNING.



A large classroom made up of students of *diverse* cultures and abilities, who are very *competitive* amongst, and *distrusting* of, each other and who see the teacher as the only expert, destroys students self esteem, enjoyment and does not enhance their academic performance.

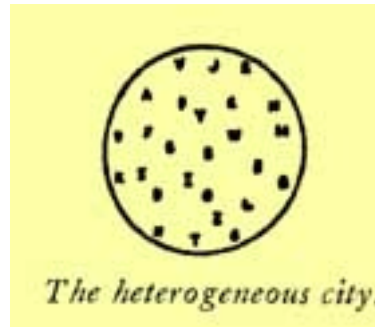
The JIGSAW method originated with the desegregation of the schooling system in America. For the first time students from different ethnic and racial groups, with varying intellectual skills and abilities, were confronted by daily contact with each other in classrooms. There was a lot of mistrust and misunderstanding and a great deal of conflict, which occasionally flared into physical violence. Aronson, a social psychologist from Austin, Texas, devised an intervention that dealt with the issue as a learning problem rather than taking a crisis management approach (Aronson, 1978).

I. Diversity



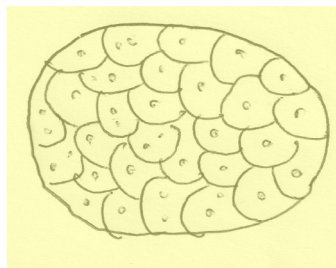
Alexander (1979)

In a segregated schooling system, the classrooms, like the ghettos, are internally homogenous but they do not allow for a variety of learning styles and perspectives to emerge. People have less chance to evolve and are often intolerant of ways that differ from their own.



Alexander (1979)

The desegregation laws aimed at creating a rich society of learners by mixing them all together, but this resulted in a dampening of all significant variety and an encouragement of conformity to the dominant culture, which was also the most privileged and was reflected in a marked difference in skills and abilities. Removing the boundaries of the ghettos did nothing to lower the anxiety and increase the self-esteem of those underprivileged and underachieving learners, which continued to have a negative impact on their academic performance.



A mosaic of mixed-subcultures

Aronson (1978) envisaged a process whereby a large, diverse classroom could be regrouped into a mosaic of self-governing SMALL GROUPS each with a representative mix, likened to the diversity of the class with regards academic ability, sex and ethnicity (Slavin, 1985). Within these structures the students would be supported in showing mutual respect and trust by developing their skills of listening to each other, working interdependently and developing commitment to the team (Kordaki & Siempos, 2010).

II Competition

Our society values competition and this is reflected in the classroom, often to the detriment of the well-being and academic performance of many students. Students compete against each other for the attention and approval of the teacher. Instead of co-operating they exclude, judge and label each other, with the successful students denigrating the unsuccessful ones and the latter often withdrawing completely from even trying to participate. Aronson hoped to structure the learning process in such a way that success could only be achieved through co-operative behaviour rather than individual competitiveness.

III Expertise

Traditionally the teacher was viewed as the only expert and source of information. This also reinforced the idea that there could only be one correct answer. The JIGSAW method creates

the opportunity for each student to become an expert in an area and to share this expertise with their peers, thus becoming a valued member of the team.

IV JIGSAW I, II, III and IV

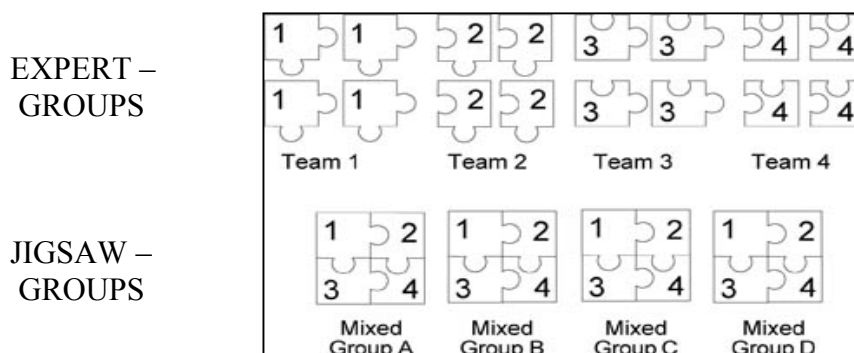
In JIGSAW (Aronson, 1978), each student, in a heterogeneous group of 5-6 students known as Jigsaw-Groups (learning groups (Brown, 1992)), are given one necessary and unique subtopic of the overarching lesson that the whole group is studying. Students first meet in heterogeneous Expert-Groups (research groups (Brown, 1992) with their counterparts from other groups to discuss and learn the subtopic. The Expert-Group members also assist each other in PRESENTATION skills they will use to teach their subtopic. When the Jigsaw-Groups reconvene, each student is an expert in one subtopic, each holds 1/5 of the information that the group needs to know to complete the lesson, hence the term JIGSAW. The students need to co-operate in order for each one to RECIPROCALLY TEACH their particular subtopic until the group has covered the entire lesson's material. When the study unit is completed students can be tested and receive a grade based on their individual test performance. This is a CO-OPERATIVE LEARNING structure.

Variations of JIGSAW have been introduced as JIGSAW II (Slavin, 1985) and JIGSAW III and IV (Holliday, 2002), which have included, inter alia, a COLLABORATIVE LEARNING component. Better results in helping behaviour and academic achievement were obtained when EVALUATION included a **co-operative reward structure** by assigning grades individually as well as based on the average performance of the Jigsaw-Group (Moskowitz, Malvin, Schaeffer, & Schaps, 1985).

The variations on the original JIGSAW methods also include FORMATIVE EVALUATION procedures to ensure the groups are achieving their *LEARNING GOALS* during the learning process and as an indicator when the teacher needs to intervene with direct teaching to get the class or particular groups back on track (Holliday, 2002).

Therefore:

Arrange the work in such a way that learning revolves around interaction with peers. Provide students with the possibility of assisting each other, in small heterogeneous *EXPERT-GROUPS*, to become experts in an area of learning and to develop the interpersonal and interactive skills necessary to RECIPROCALLY TEACH this expertise to their peers in heterogeneous *JIGSAW-GROUPS*. FACILITATE mutual interdependence to achieve the learning goals. Use different EVALUATION strategies to reinforce the accountability each has for their individual, as well as peer's, learning.



Tewksbury (2009)



Arrange the class into a number of heterogeneous SMALL GROUPS whose task it is to complete RESEARCH on their topic and then use PRESENTATION skills to RECIPROCALLY TEACH their peers. Provide the SCAFFOLDING necessary through FACILITATION and MODERATION to enhance the atmosphere of trust and respect between the students and enable them to value the expertise of their peers – MASTER AND APPRENTICE. Different EVALUATION strategies can be used to support helping behaviour and enhance academic performance



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